

REMARKS

The applicant thanks the examiner for acknowledging applicants' claim for foreign priority and reception of the certified copy of the foreign priority document that was submitted on 16 September 2003. The applicant also thanks the examiner for having returned an initialed copy of the PTO 1449 that was submitted on 16 September 2003.

Claims 2, 7 and 18 have been canceled. New claims 22 - 59 are presented for examination. The applicant respectfully requests reconsideration and allowance of this application in view of the above amendments and the following remarks.

Claims 1 - 21 were rejected under 35 USC 112, second paragraph, as being indefinite. The applicant respectfully requests that this rejection be withdrawn for the following reasons.

Regarding claim 1, the examiner has asserted that the limitation "the same monitoring range" lacks sufficient antecedent basis. The applicant has accordingly amended this portion of claim 1 to recite "a predetermined region of a real space sequentially in time." That is, the limitation at issue has been deleted.

Regarding claim 12, the examiner has asserted that the limitation "the highest luminance value" lacks sufficient antecedent basis. The applicant has accordingly amended this portion of claim 12 to give antecedent basis to this limitation.

Regarding claim 13, the examiner has asserted that the limitation "the absolute value" lacks sufficient antecedent basis. This limitation has been deleted incidentally to amendments to claim 13.

Regarding claim 20, the examiner has asserted that the limitation "take a photograph continuously" is unclear because the claim is silent as to what is being photographed. The

applicant has accordingly amended claim 20 to recite “image composing means for producing a composite image from all or a part of said plurality of static images and said background image of said predetermined region of said real space.”

Therefore, because the claims, as amended, recite clear and definite subject matter, it is respectfully requested that the rejection of claims 1 - 21 under 35 USC 112, second paragraph be withdrawn.

Claims 1, 3 and 9 - 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,838,365 to Sawasaki *et al.* (hereafter: “Sawasaki”). The applicant respectfully requests that this rejection be withdrawn for the following reasons.

Claim 1 has been amended to recite *inter alia* the novel embodiment disclosed, for example, on pgs. 4 - 6 in which a moving body detecting apparatus includes (i) image capturing means which first captures static images in a predetermined region of a real space, and decision processing means which subsequently makes a comparison among these static images for making a decision as to whether or not a body moves from an “allowable area” allowing the existing of a body to an “unallowable area” inhibiting the existence of a body (page 4, lines 21-28), and (ii) both of said allowable area and said unallowable area are posteriori defined as a recognizing result of a figure of a candidate body in said static images (page 5, line 8-page 6, line 6), (iii) as a byproduct of the above mentioned feature (ii), a watching region is posteriori defined, where said watching region is sum of said allowable area and said unallowable area and, as a matter of course, said decision processing means makes a comparison among these static images for making a decision as to whether or not a body moves from an “allowable area” allowing the existing of a body to an “unallowable area” inhibiting the existence of a body only in the watching region.

Sawasaki discloses a local region image tracking apparatus for continuously tracking an arbitrary local region within a search image, comprising an image pickup device such as a camera, an image input unit including A/D converter, and a plurality of correlation tracking processor which are coupled to the image input unit via an image bus. A room detector judges that an intruding object exists within a room if a difference image data is greater than or equal to a predetermined value (col. 30, lines 11-14). The difference image data related to a difference image is obtained by subtracting a background image data from an input image data. Furthermore, in the local region tracking apparatus of Sawasaki, a moving quantity is obtained by peak positions of correlation values obtained by a correlation computation unit (col. 30, lines 38-52) in accordance with the following formula:

$$D_{m,n} = \sum_{i=0}^7 \sum_{j=0}^7 |X_{i,j} - Y_{i+m,j+n}|$$

wherein $D_{m,n}$ is said correlation values, $X_{i,j}$ is a pixel value within a reference image and $Y_{i,j}$ is a pixel value within a search image. Since the value of $D_{m,n}$ becomes larger as the two images become more different to each other (col. 24, lines 1-8). Thus, in the context of apparatus of Sawasaki, an “allowable area” and an “unallowable area” is defined in a parameter space of correlation values not in real space.

Therefore, because Sawasaki et al. fails to teach or suggest the feature (i) - (iii) of amended claim 1, the rejection of claim 1, as well as dependent claims 3 and 9 - 11 should be withdrawn.

Claims 4 - 5 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sawasaki in view of U.S. Patent No. 5,063,524 to Ferre *et al.* (hereafter: “Ferre”). The applicant respectfully requests that this rejection be withdrawn for the following reasons.

Claims 4 – 5 and 8 depend from claim 1. Therefore, the rejection of these claims should be withdrawn for at least the above-mentioned reasons with respect to claim 1.

Further, as admitted by the examiner, Sawasaki fails to teach or suggest difference calculating means for calculating a difference of luminance level of images and producing a difference image based on said calculated difference of luminance images. The examiner has cited Ferre in order to cure the deficient teachings of Sawasaki.

Ferre discloses a method for estimating the motion of at least one target in a sequence images. However, Ferre also fails to teach or suggest calculating a difference of luminance level of images and producing a difference image based on said calculated difference of luminance images. Rather, Ferre discloses using the information given by the modulus of coefficients, of the inverse transformed matrix of the phase correlation matrix.

Therefore, assuming *arguendo* that one skilled in the art would be motivated to modify Sawasaki in view of Ferre, such a modification would still fails to discloses the limitation (i)-(iii) recited in claim 1. Accordingly, the rejection of claims 4 – 5 and 8 should be withdrawn.

Claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over Sawasaki in view of U.S. Patent No. 6,819,778 to Kamei. The applicant respectfully requests that this rejection be withdrawn for the following reasons.

Claim 6 depends from claims 1 and 4. Therefore, the rejection of these claims should be withdrawn for at least the above-mentioned reasons with respect to claims 1 and 4.

New claims 22 - 59 are presented for examination. These claims recite features that further distinguish the present invention from the art of record. Support for new claims 22 - 38 can be found in, for example, Figs. 7, 9, 19 and 20. Support for new claims 39 - 59 can be found in, for example, Figs. 1 and 8.

In view of the foregoing, applicant submits that this application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

If there are any problems with the payment of fees, please charge any underpayments and credit any overpayments to Deposit Account No. 50-1147.

Respectfully submitted,

A handwritten signature in black ink, reading "Kerry S. Culpepper", written over a horizontal line.

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